



VAT Vakuumentile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 111, DN 250 (10")**  
**Ordering No. 11148-PE44**

### Description

|             |  |
|-------------|--|
| Flange      | ISO-F 250  |
| Actuator    | pneumatic, double acting<br>– with solenoid valve<br>– with position indicator |
| Feedthrough | Bellows  |

### Technical data

|  |  |  |
|--|--|--|
| Leak rate  | – Valve body<br>– Valve seat   | $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup><br>$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>                     |
| Pressure range   |  | $1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)  |
| Differential pressure on the gate  |  | $\leq 1.2$ bar   |
| Differential pressure at opening   |  | $\leq 30$ mbar   |
| Conductance (molecular flow)   |  | 21 690 ls <sup>-1</sup>  |
| Cycles until first service   |  | 200 000 (unheated and under clean conditions)  |
| Temperature<br>(Maximum values: depending on operating conditions and sealing materials) | – Valve Body<br>– Actuator<br>– Solenoid valve<br>– Position indicator | $\leq 150$ °C (bake-out max. 24h)<br>$\leq 120$ °C<br>$\leq 50$ °C<br>$\leq 80$ °C                         |
| Heating and cooling rate   |  | 50 °C h <sup>-1</sup>  |
| Material (main components)   | – Valve Body<br>– Mechanism<br>– Bellows<br>– Bushing                  | AISI 304 (1.4301)<br>AISI 316L (1.4404), AISI 304 (1.4301)<br>AISI 316L (1.4404, 1.4435)<br>Hydrocarbonate |
| Seal   | – Bonnet<br>– Gate<br>– Actuator                                       | FKM (Viton®)<br>FKM (Viton®), O-ring<br>FKM (Viton®), NBR  |
| Mounting position  |  | any  |
| Volume of pneumatic actuator   |  | 0.35 l / 0.0122 ft <sup>3</sup>  |
| Compressed air<br>min. – max. overpressure   |  | 5 – 7 bar / 73 – 102 psi   |
| Compressed air connection  |  | G $\frac{1}{8}$ " (½" NPT for USA)   |
| Actuation time   | – closing<br>– opening   | 4 s<br>4 s   |
| Weight   |  | 51 kg / 112 lbs  |
| Behavior in case of compressed air pressure drop   | – Valve closed<br>– Valve open   | valve remains closed<br>undefined  |
| Behavior in case of power failure  | – Valve closed<br>– Valve open   | valve remains closed<br>valve closes   |

|                   |                          |                 |
|-------------------|--------------------------|-----------------|
| Created by: SCHMC | Release date: 09.07.2019 | 1/2             |
| Modified by:      | Release date:            | <b>979517EA</b> |



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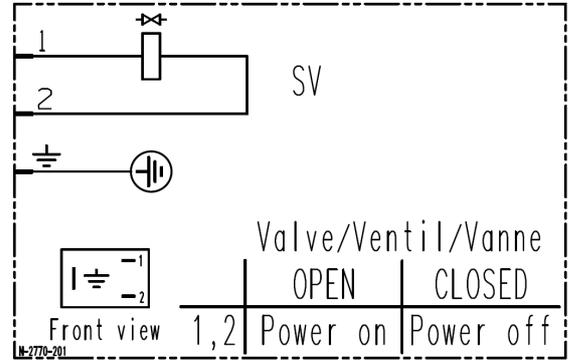
**HV gate valve, Series 111, DN 250 (10")**

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### Electrical connections

#### Solenoid valve

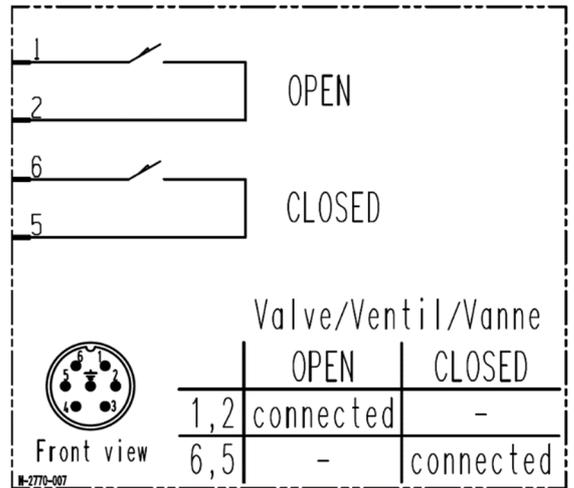
Type 4/2 way  
Voltage Defined by order



Wiring diagram

#### Position indicator

Type Micro switch  
Voltage  $\leq 50$  V AC / DC  
Current max.  $\leq 1.2$  A



Wiring diagram

|                   |                          |                 |
|-------------------|--------------------------|-----------------|
| Created by: SCHMC | Release date: 09.07.2019 | 2/2             |
| Modified by:      | Release date:            | <b>979517EA</b> |